Thanawat **Lodkaew**

STUDENT

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"Be inspired to do research on AI that is changing the world."

Edu**cation**

King Mongkut's Institute of Technology Ladkrabang (KMITL) *Bangkok, Thailand*
STUDYING TOWARDS A BACHELOR DEGREE IN INFORMATION TECHNOLOGY *Graduation date: Jun. 2020 (expected)*
- GPA 3.77 (4.00 scale)

Exp**erience**

Vidyasirimedhi Institute of Science and Technology (VISTEC) *Rayong, Thailand*
RESEARCH INTERN UNDER THE SUPERVISION OF PROF. **SUPASORN SUWAJANAKORN** *May. 2019 - Jul. 2019*
- Having proposed a deep-learning-based framework for removing furniture object in room image. This framework uses an image inpainting technique as the essential component

National Institute of Technology, Kurume College *Fukuoka, Japan*
EXCHANGE STUDENT UNDER THE SUPERVISION OF PROF. **YOSHIMITSU KUROKI** *Jun. 2018 - Jul. 2018*
- Having researched for an improvement of the Saak transform using convex optimization on sparse representation

Data Science and Machine Learning Research Laboratory (DSMLR) *Bangkok, Thailand*
RESEARCH INTERN UNDER THE SUPERVISION OF PROF. **KITSUCHART PASUPA** *Jun. 2017 - PRESENT*
- Having proposed a computer-vision-based approach for heat detection in cows [1]
- Having proposed an approach for retrieving similar visual objects by utilizing CNN features for similarity measurement and using object segmented images instead of object-cropped images for better results [2]

Ext**racurricular Activity**

Deep Learning and Artificial Intelligence Winter School by World Renowned Researchers *Bangkok, Thailand*
ATTENDED AS A STUDENT *Dec. 2017 (3 days)*
- Having gained knowledge about several aspects of deep learning and artificial intelligence like deep CNN neocognitron for artificial vision, randomized algorithms, swarm search and deep learning for emotion

Workshop on Introduction to Social Computing by Prof. Irwin King *Bangkok, Thailand*
ATTENDED AS A STUDENT *June. 2017 (5 days)*
- Having gained knowledge about collecting, extracting, accessing, processing, computing and visualizing social signals and information
- Having had a clear understanding of the fundamentals of recommendation system

Pub**lications**

[1] Kitsuchart Pasupa and **Thanawat Lodkaew**, A New Approach to Automatic Heat Detection of Cattle in Video, *In Proceeding of the 26th International Conference on Neural Information Processing (ICONIP 2019), 12-15 December 2019, Sydney, Australia*, pp. 330-337, 2019.

[2] **Thanawat Lodkaew**, Weeruhputt Supsohmboon, Kitsuchart Pasupa, Chu Kiong Loo, Fashion Finder: A System for Locating Online Stores on Instagram from Product Images, *In Proceeding of the 10th International Conference on Information Technology and Electrical Engineering (ICITEE 2018), 24-26 July 2018, Bali, Indonesia*, pp. 500-501, 2018.

Hav**ing Taken Several AI-Related Courses**

Machine Learning course
B+ GRADE
- Having gained full comprehension of several basic machine learning algorithms like least squares, linear regression, logistic regression, neural networks, support vector machine, k-nearest neighbor and k-mean clustering
- Having had a complete practice in evaluating machine learning model performance and solving overfitting problem with regularization

Computer Vision course

A Grade

- Having gained knowledge about several computer vision approaches and applications like morphological operations, image segmentation, image classification, detecting interesting points, matching interesting points and filtering images
- Having performed a watershed-based framework for red blood cell segmentation for calculating parasite density in malaria diagnose (a mini-project)

Image Processing course

B+ Grade

- Having gained knowledge about dealing with images in spatial and frequency domains
- Having had a clear understanding on filtering images by different types of filters and handling images at pixel-level for particular proposes, e.g., image restoration and image segmentation
- Having implemented a conceptual framework for scene text detection and recognition of uneven background images (a mini-project)

Honors & Awards

International

2017	**Special Prize Award**, NAPROCK International Programming Contest	*Yamaguchi, Japan*
2017	**Finalist**, International ICT Innovative Services Contest	*Taipei, Taiwan*

Domestic

2019	**3rd Place**, IST-FR 2019 Symposium	*Rayong, Thailand*
2018	**3rd Place**, National Software Contest on Artificial Intelligence Application	*Bangkok, Thailand*
2017	**Honorable Mention Award**, MUICT DataHack	*Bangkok, Thailand*
2017	**Finalist**, TechJam Competition on Data Science Squad	*Bangkok, Thailand*

Technical Skills

Machine Learning Programming	Python with popular machine learning libraries such as Tensorflow, Keras, Sci-Kit Learn and Numpy
Cloud Computing Services	Google Cloud Platform (Compute Engine)

Languages

- **Thai**, Native
- **English**, Reading = Advanced, Writing = Intermediate, Speaking = Intermediate, Listening = Intermediate

References

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